

## ABSTRACT OF THE DISCLOSURE

Systems and methods for designing integrated circuits and for creating and using androgynous interfaces between electronic components of integrated circuits are disclosed. One preferred method of designing an integrated circuit includes several steps. In one step, a foundation block for the integrated circuit is specified, including specifying the locations of multiple androgynous interfaces in the integrated circuit. In another step, one or more component blocks to comprise the integrated circuit are identified for use. In another step, the component blocks to form a layout of the integrated circuit are positioned in a manner that minimizes connection distances between functional blocks and between functional blocks and the androgynous interfaces. In another step, the androgynous interfaces are set to perform as targets (slaves) or initiators (masters) based on the layout.